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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,036	10/01/2004	Yong Seog Kim	3449-0389PUS1	4661
2292	7590	04/18/2006		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER HINES, ANNE M	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H/A

**Office Action Summary**

Application No.

10/510,036

Applicant(s)

KIM ET AL.

Examiner

Anne M. Hines

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1-5,9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-8 and 10 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

The response to the restriction requirement filed on February 15, 2006, has been entered and acknowledged by the Examiner. The Examiner acknowledges that Group II, claims 6-8 and 10 have been elected without traverse.

Claims 6-8 and 10 are pending in the instant application.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Objections***

Claim 6 is objected to because of the following informalities: Claim 6 claims a composition comprising more than 100 wt% ((a) has 100 wt%, (b) has 20 to 40 wt%, etc.). It appears to the Examiner based on Page 7, lines 10-14 of the disclosure that the weight percentages of (b), (c), (d), and (e) of claim 6 are based on the 100 wt% of the mixed powder of (a) in claim 6. The Examiner has treated the claims on their merits assuming that the weight percentages of (b)-(e) are based on 100 weight percent of (a). Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6-8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al. (EP 0893813).

Regarding claims 6-8, Wang discloses a composition for manufacturing barrier ribs for a Plasma Display Panel (PDP) comprising: (a) 100wt% of mixture of PbO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> powder (Page 11, line 46 to Page 12, line 10) and Al<sub>2</sub>O<sub>3</sub> powder (Page 6, lines 5-6) of which a volume ratio is in the range of 50:50 to 95:5 (Page 5, lines 48-50; Page 6, lines 16-17) and wherein the average particle size of the powders is between 0.2 and 5 µm (Page 6, lines 9-12); (b) 20 to 40wt%, based on the powder mixture, of methyl ethyl ketone (MEK) solvent (Page 8, lines 25-29; Page 10, lines 42-57); (c) 2 to 12wt%, based on the powder mixture, of binder including water soluble components and solvent soluble components together (Page 11, Table 1—see weight % of acrylate and methacrylate polymers for white layer); (d) 3 to 18wt%, based on the powder mixture, of dibutyl phthalate (DBP) plasticizer (Page 7, line 58; Page 11, Table 1—see weight % of plasticizer for white layer); and (e) 0.5 to 2wt%, based on the powder mixture, of a acrylic acid dispersion agent (Page 7, lines 6-7). Wang further discloses wherein the volume ratio of polyvinyl acetate water soluble binder to methyl methacrylate solvent soluble binder is in the range of 20:1 to 1:20 (Page 7, lines 5-40); the average molecular

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weights of the materials of the binders are inherently within the claimed range since molecular weight is a material property. Note that the Examiner considers the following equivalencies inherent: ethylene-based unsaturated carboxylic acid is acrylic acid; a homopolymer of vinyl acetate is polyvinyl acetate; and C1 alkyl methacrylate is methyl methacrylate.

Regarding claim 10, Wang further discloses a plasma display panel using the barrier ribs manufactured according to the method defined in claim 6 (Page 2, lines 5-7).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne M. Hines whose telephone number is (571) 272-2285. The examiner can normally be reached on Monday through Friday from 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anne M Hines  
Patent Examiner  
Art Unit 2879

*Amtt*  
*4/13/06*

*Msigo 4/14/06*  
**MARICELI SANTIAGO**  
**PRIMARY EXAMINER**